

CLAIM AMENDMENTS

Claims 1-14 (canceled)

Claim 15. (Currently amended) A process for making a photosensitive element comprising the steps of:

- providing a photosensitive element comprising:
 - a) a backing layer;
 - b) at least one layer of photopolymerizable material on said backing layer;
 - c) at least one ablation layer which is ablatable by infrared radiation ~~and opaque to non-infrared actinic radiation~~, wherein the ~~infrared~~ ablation layer is in direct contact with the at least one photopolymerizable layer and has a surface opposite the photopolymerizable layer capable of being exposed to laser ablation, the ~~infrared~~ ablation layer comprising:
 - i) at least one ~~infrared~~ ultraviolet radiation absorbing material;
 - ii) at least one binder which is selected from the group consisting of polyacetals, polyacrylics, polyamides, polyimides, polybutylenes, polycarbonates, polyesters, polyethylenes, polyphenylene ethers, and polyethylene oxides ~~that is a polyacetal, polyacrylic, polyamide, polyimide, polybutylene, polycarbonate, polyester, polyethylene, polyphenylene ether, or polyethylene oxide~~;
- wherein the ~~infrared~~ ablation layer is ablatable from the surface of the photopolymerizable layer upon exposure to infrared laser radiation; ~~and~~
- ablating said ablation layer using a laser, thereby providing ablated and unablated areas forming an image; and
 - flood exposing said ablated element to UV light without a negative.

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thereby curing said photopolymerizable layer in areas under ablated areas of said ablation layer.

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Claim 16. (Canceled)

Claim 17. (Currently amended) The process of claim ~~16~~ 15 further comprising developing said exposed element.

Claim 18. (Previously presented) The process of claim 15 wherein said backing layer is transparent.

Claim 19. (Previously presented) The process of claim 15 wherein said photopolymerizable layer includes a polyurethane, acrylonitrile rubber, or a diblock or triblock copolymer made from styrene-isoprene or styrene-butadiene.

Claim 20. (Previously presented) The process of claim 19 wherein said polyurethane is an acid-modified acrylate polyurethane or an amine-modified acrylate polyurethane.

Claim 21. (Canceled)

Claim 22. (Previously presented) The process of claim 15 wherein the at least one binder is a polyamide.

Claims 23-25. (Canceled)

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Claim 26. (Currently amended) The process of claim 15 wherein the ultraviolet radiation ~~infrared~~ absorbing material constitutes about 1-20 weight parts per hundred of said ablation layer.

Claim 27. (Previously presented) The process of claim 15 wherein said laser used to

ablate said ablation layer emits light having a wavelength of 10.6 μm .

Claim 28-29. (Canceled)

Claim 30. (Previously presented) A process comprising the steps of:

- providing a solid, photopolymerizable printing plate comprising:
 - a backing;
 - at least one layer of photopolymerizable material on said backing, said photopolymerizable layer comprising a photopolymer which is unaffected by radiation at a selected wavelength in the range of 300-400 nm and an initiator activatable at the selected wavelength; and
 - a radiation absorbing layer over said photopolymerizable layer, said absorbing layer comprising a polymeric matrix that is transparent to ultraviolet radiation and a dopant having a high extinction coefficient in the wavelength range of 300-400 nm, wherein said radiation absorbing layer is capable of being photoablated by a laser operating at a first energy level in the wavelength range of 300-400 nm, and wherein unablated areas of said absorbing layer are capable of absorbing at least 95% of irradiated light in the wavelength range of 300-400 nm from an ultra-violet light source operating at a second energy level lower than said first energy level; and
- ablating said absorbing layer using a laser, thereby providing ablated and unablated areas forming an image.

Claim 31. (Previously presented) The process of claim 30 further comprising flood exposing said ablated element to UV light without a negative, thereby curing the photopolymerizable layer in areas under ablated areas of said absorbing layer.

Claim 32. (Previously presented) The process of claim 31 further comprising developing said exposed element.

Claim 33. (Previously presented) The process of claim 30 wherein said backing layer is transparent.

Claim 34. (Previously presented) The process of claim 30 wherein said photopolymerizable layer includes a polyurethane, acrylonitrile rubber, or a diblock or triblock copolymer made from styrene-isoprene or styrene-butadiene.

Claim 35. (Previously presented) The process of claim 34 wherein said polyurethane is an acid-modified acrylate polyurethane or an amine-modified acrylate polyurethane.

Claim 36. (Previously presented) The process of claim 30 wherein said polymeric matrix includes a polyacetal, polyacrylic, polyamide, polyimide, polybutylene, polycarbonate, polyester, polyethylene, cellulosic polymer, polyphenylene ether, or polyethylene oxide.

Claim 37. (Previously presented) The process of claim 36 wherein said polymeric matrix includes a polyamide.

Claim 38. (Previously presented) The process of claim 36 wherein said polymeric matrix includes a cellulosic polymer.

Claim 39. (Previously presented) The process of claim 38 wherein the polymeric matrix includes hydroxypropylcellulose.

Claims 40-41. (Canceled)


Claim 42. (Previously presented) The process of claim 30 wherein said dopant constitutes about 1-20 weight parts per hundred of said radiation absorbing layer.

Claim 43. (Canceled)

Claim 44. (Previously presented) The process of claim 30 wherein said laser used to ablate said ablation layer emits light having a wavelength of 10.6 μm .

Claim 45. (Previously presented) The process of claim 30 wherein said laser used to ablate said ablation layer emits light having a wavelength of 300-400 nm.

Claim 46. (New) A process for preparing a flexographic printing plate comprising the steps of:

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- providing a solid, photopolymerizable printing plate comprising:
 - a backing;
 - at least one layer of photopolymerizable material on said backing, said photopolymerizable layer comprising a photopolymer which is unaffected by radiation at a selected wavelength and power and an initiator activatable at the selected wavelength; and;
 - a radiation absorbing layer over said photopolymerizable layer, said absorbing layer comprising a polymeric matrix that is transparent to ultraviolet radiation and a dopant having a high extinction coefficient in the wavelength range of 300-400 nm, wherein said radiation absorbing layer is capable of being photoablated by a laser at a selected wavelength and power; and
 - ablating said absorbing layer using a laser at the selected wavelength and power, thereby providing ablated and unablated areas forming an image.

Claim 47. (New) The process of claim 46 further comprising flood exposing said ablated element to UV light without a negative, thereby curing the photopolymerizable layer in areas under ablated areas of said absorbing layer.

Claim 48. (New) The process of claim 47 further comprising developing said exposed element.

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Claim 49. (New) The process of claim 46 wherein said dopant constitutes about 1-20 weight parts per hundred of said radiation absorbing layer.

Claim 50. (New) The process of claim 46 wherein said laser used to ablate said ablation layer emits light having a wavelength of 10.6 μm .

Claim 51. (New) The process of claim 30 wherein said laser used to ablate said ablation layer emits light having a wavelength of 300-400 nm.
